## Amendments to the Claims:

- 1. (Currently Amended) A superabsorbent polymer <u>composition</u> comprising <u>a superabsorbent polymer comprising</u>
- a) from about 55 to about 99.9 wt.% of polymerizable unsaturated acid group containing monomers;
- b) from about 0.001 to about 5.0 wt.% by weight of internal crosslinking agent based on the weight of a);

wherein elements a) and b) are polymerized and prepared into superabsorbent polymer particles; wherein the superabsorbent polymer particles further comprise the following surface additives

- c) from about 0.001 to about 5.0 wt.% by weight of surface crosslinking agent applied to the particle surface based on dry polymer powder weight;
- d) from [[0]] <u>about 0.01%</u> to about 5 wt.% <u>by weight</u> of a penetration modifier immediately before, during or immediately after the surface crosslinking step <u>based on dry polymer powder weight</u>;
- e) from 0 to about 5 wt.% by weight of a multivalent metal salt on the surface based on dry polymer powder weight;
- f) from 0 to 2 wt.% by weight of a surfactant on the surface based on dry polymer powder weight;
- g) from about 0.01 to about 5 wt.% by weight of an insoluble, inorganic powder based on dry polymer powder weight; and

h) from about 0.01 to 5wt.% by weight of a thermoplastic polymer based on dry polymer powder weight, said thermoplastic polymer having a thermoplastic melt temperature wherein the thermoplastic polymer is applied on the particle surface coincident with or followed by a temperature at least about the thermoplastic melt temperature or greater,

wherein the <u>superabsorbent polymer</u> composition has a degree of neutralization of more than about 25%; <u>and having the characteristics of centrifuge retention capacity of about 25g/g or more</u>; a gel bed permeability I of about  $500 \times 10^{-9} \text{cm}^2$  or more; or a gel bed permeability II of about  $300 \times 10^{-9} \text{cm}^2$  or more.

- 2. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 1 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.18x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 3. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 1 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.175x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 4. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 1 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.17x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 5. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 1 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.165x</sup> +100] x10<sup>-9</sup>cm<sup>2</sup>.

- 6. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 1 wherein the thermoplastic polymer is selected from <u>the group consisting of polyolefin</u>, polyethylene, polyesters, polyurethanes, linear low density polyethylene (LLDPE), ethylene acrylic acid copolymer (EAA), styrene copolymers, ethylene alkyl methacrylate copolymer (EMA), polypropylene (PP), ethylene vinyl acetate copolymer (EVA) <u>and or blends thereof</u>, and <u>or copolymers thereof</u>.
- 7. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 1 having a Dust Values of about 4 or less.
- 8. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 1 having a gel bed permeability I of about  $800 \times 10^{-9} \text{cm}^2$  or more; or a gel bed permeability II of about  $500 \times 10^{-9} \text{cm}^2$  or more.
- 9. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 1 having a shear modulus of less than about 9500 dynes/cm<sup>2</sup>.
- 10. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 1 having a shear modulus from about 4000 dynes/cm<sup>2</sup> to about 8500 dynes/cm<sup>2</sup>.

- 11. (Currently Amended) The superabsorbent polymer <u>composition</u> comprising <u>a superabsorbent polymer comprising:</u>
- a) from about 55 to about 99.9 wt.% of polymerizable unsaturated acid group containing monomers;
- b) from about 0.001 to about 5.0 wt.% <u>based on the weight of a</u>) of internal crosslinking agent;

wherein elements a) and b) are polymerized and prepared into superabsorbent polymer particles; wherein the superabsorbent polymer particles further comprise the following surface additives

- c) from about 0.001 to about 5.0 wt.% by weight of surface crosslinking agent applied to the particle surface based on dry polymer powder weight;
- d) from [[0]] <u>about 0.01%</u> to about 5 <del>wt.</del>% <u>by weight</u> of a penetration modifier immediately before, during or immediately after the surface crosslinking step <u>based on dry polymer powder weight;</u>
- e) from 0 to about 5 wt.% by weight of a multivalent metal salt on the surface based on dry polymer powder weight;
- f) from 0 to 2 wt.% by weight of a surfactant on the surface based on dry polymer powder weight;
- g) from about 0.01 to about 5 wt.% by weight of an insoluble, inorganic powder based on dry polymer powder weight; and

h) from about 0.01 to wt.% by weight of a thermoplastic polymer based on dry polymer powder weight, the thermoplastic polymer having a thermoplastic melt temperature wherein the thermoplastic polymer is applied on the particle surface coincident with or followed by a temperature at least about the thermoplastic melt temperature or greater,

wherein the composition has a degree of neutralization of more than about 25%; having the characteristics of centrifuge retention capacity of about 25g/g or more; a gel bed permeability I of about  $200 \times 10^{-9} \text{cm}^2$  or more; or a gel bed permeability II of about  $150 \times 10^{-9} \text{cm}^2$  or more.

- 12. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 8 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.18x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 13. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 8 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.175x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 14. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 8 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.17x</sup> + 1001 x10<sup>-9</sup> cm<sup>2</sup>.
- 15. (Currently Amended) The superabsorbent polymer <u>composition</u> according to claim 8 wherein GBP gel bed permeability I is at least about [54000e<sup>-0.165x</sup> + 100] x10<sup>-9</sup>cm<sup>2</sup>.
- 16. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 8 wherein the thermoplastic polymer is selected from the group consisting of polyolefin, polyethylene, polyesters, polyurethanes, linear low density polyethylene (LLDPE), ethylene

acrylic acid copolymer (EAA), styrene copolymers, ethylene alkyl methacrylate copolymer (EMA), polypropylene (PP), ethylene vinyl acetate copolymer (EVA) and or blends thereof, and or copolymers thereof.

- 17. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 8 having a Dust Values of about 4 or less.
- 18. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 10 having a shear modulus of less than about 9500 dynes/cm<sup>2</sup>.
- 19. (Currently Amended) The superabsorbent polymer <u>composition</u> of claim 10 having a shear modulus from about 4000 dynes/cm<sup>2</sup> to about 8500 dynes/cm<sup>2</sup>.
- 20. (New) The superabsorbent polymer composition according to claim 1 comprising from about 0.1 to about 5 % by weight of a multivalent metal salt based on the dry polymer powder weight.
- 21. (New) The superabsorbent polymer composition of claim 1 wherein the insoluble, inorganic powder is silica.
- 22. (New) The superabsorbent polymer composition of claim 11 wherein the insoluble, inorganic powder is silica.

- 23. (New) The superabsorbent polymer composition of claim 11 comprising from about 0.01 to 5% by weight of a thermoplastic polymer based on dry polymer weight, the thermoplastic polymer having a thermoplastic melt temperature wherein the thermoplastic polymer is applied on the superabsorbent polymer particle surface coincident with or followed by a temperature of the coated superabsorbent polymer particle of at least about the thermoplastic melt temperature or greater.
- 24. (New) A method to make a superabsorbent polymer composition comprising the steps of:
  - a) preparing a superabsorbent polymer by the process of polymerizing from about 55 to about 99.9 % weight of polymerizable unsaturated acid group containing monomers, and from about 0.001 to about 5 % weight of internal crosslinking agent based on the polymerizable unsaturated acid group containing monomers, and a neutralization such that the superabsorbent polymer has a degree of neutralization of more than about 25%;
    - b) preparing superabsorbent polymer particles from the superabsorbent polymer;
    - c) treating the superabsorbent polymer particles with surface additives including
    - i) from about 0.001 to about 5.0 % weight of a surface crosslinking agent based on dry polymer powder weight;
    - ii) from about 0.01 to about 10 % weight of a penetration modifier based on dry polymer powder weight;
    - iii) from about 0.01 to about 5 % weight of a multivalent metal salt based on dry polymer powder weight;
      - iv) from 0 to 2 % weight of a surfactant based on dry polymer powder weight;

- v) from about 0.01 to about 5 % weight of an insoluble, inorganic powder based on dry polymer powder weight; and
- vi) from about 0.01 to 5 % weight of a thermoplastic polymer based on dry polymer powder weight is applied on the particle surface, heat treating the coated superabsorbent polymer particle; wherein the superabsorbent polymer composition has the characteristics of centrifuge retention capacity of about 25g/g or more; a gel bed permeability I of about 500 x10<sup>-9</sup>cm<sup>2</sup> or more; or a gel bed permeability II of about 300 x10<sup>-9</sup>cm<sup>2</sup> or more.
- 25. (New) The method of claim 24 wherein in step a) at least about 50 % weight of the acid groups include carboxyl groups, the acid groups are neutralized to at least 59 mole %, and the internal crosslinking agent is from about 1.0 to about 3.0 % weight based on the total amount of the polymerizable unsaturated acid group containing monomers.
- 26. (New) The method of claim 24 wherein the heat treatment of the coated superabsorbent polymer is from about 100°C to about 300°C.
- 27. (New) The method of claim 24 wherein the heat treatment of the coated superabsorbent polymer is from about 150°C to about 250°C.
- 28. (New) The method of claim 24 wherein the superabsorbent polymer composition has a gel bed permeability I of at least about  $[54000e^{-0.18x} + 100] \times 10^{-9} \text{cm}^2$ .

- 29. (New) The method of claim 24 wherein the superabsorbent polymer composition has a gel bed permeability II of about  $500 \times 10^{-9} \text{cm}^2$  or more.
- 30. (New) The method of claim 24 wherein the superabsorbent polymer composition has a Dust Values of about 4 or less.
- 31. (New) The method of claim 24 wherein the superabsorbent polymer composition has a shear modulus of less than about 9500 dynes/cm<sup>2</sup>.
  - 32. (New) The method of claim 24 wherein the insoluble, inorganic powder is silica.